

IFW

Patent  
Attorney's Docket No. 1018760-000023

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	<b>MAIL STOP AMENDMENT</b>
Chiyo Kusubayashi	)	
Application No.: 10/541,245	)	Group Art Unit: 2836
Filed: July 1, 2005	)	Examiner: Hal Ira Kaplan
For: VEHICLE AUXILIARY ELECTRIC-	)	Confirmation No.: 5812
POWER-SUPPLYING SYSTEM	)	

**REQUEST FOR RECONSIDERATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This communication is a full and timely response to the final Office Action dated October 20, 2008. Claims 9-22 remain pending

In numbered paragraph 3, on page 2 of the Office Action, claims 9-22 are rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Nomura* (U.S. Patent No. 6,388,904) in view of *Tanaka* (U.S. Patent No. 5,703,415). Applicants respectfully traverse this rejection.

The Office alleges that *Nomura* discloses every element recited in Applicants' independent claim 9 except for the power-outputting unit, and relies on *Tanaka* in an effort to remedy this deficiency. Particularly, the Office alleges that the butt-jointed diode configuration of *Tanaka* could be integrated into *Nomura* at the point of convergence of the parallel inverter paths of *Nomura*. See Office Action, pg. 3, first full pgph. Applicants disagree with this assertion and given the guidance provided by each of the applied references, Applicants still do not believe that a *prima facie* case of obviousness is established.

Applicants' claim 9 recites, in part, the following combination of elements:

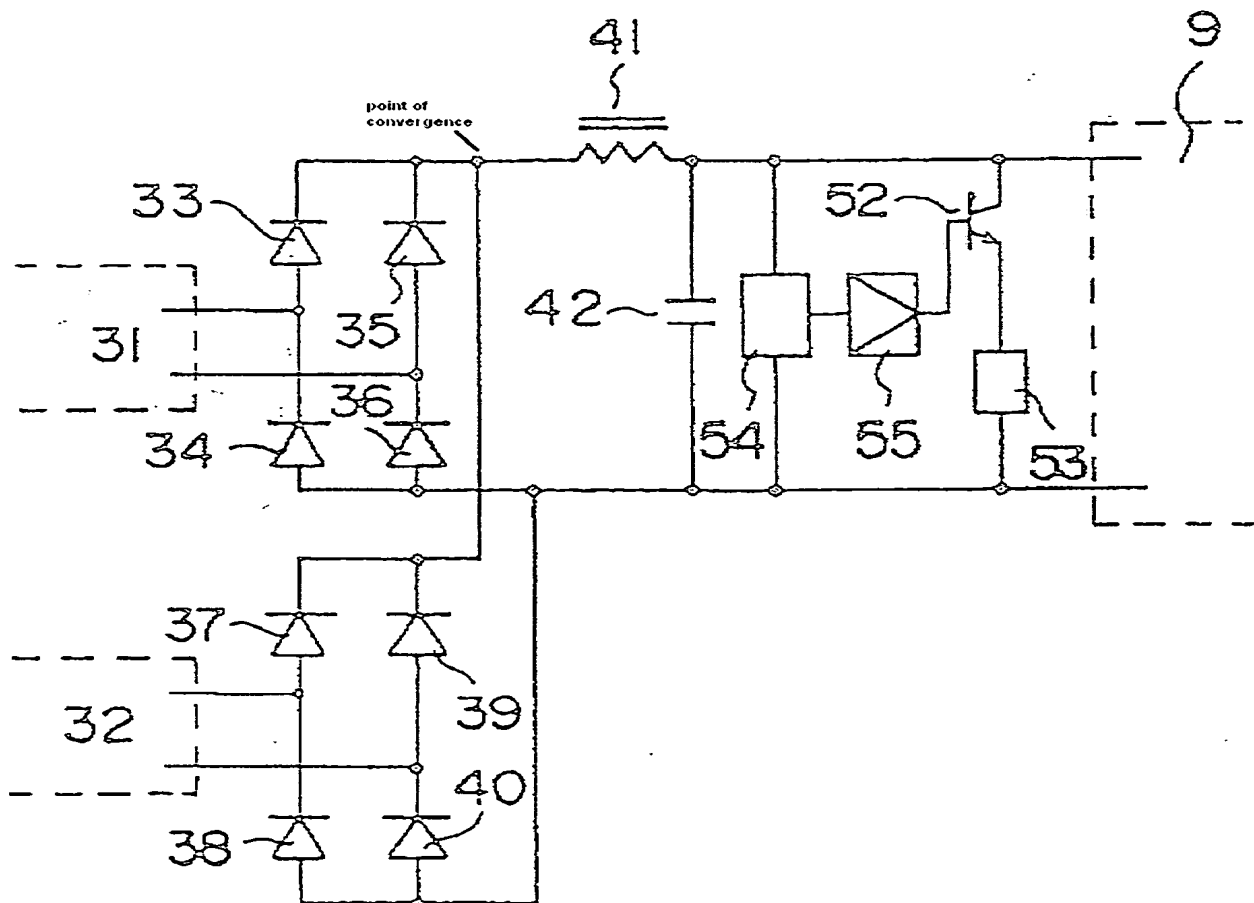
an electric power inverter **for converting first dc power received through an overhead wire to second dc power**, and supplying the second type of dc power to a dc load;  
an electric power supplier for converting the first dc power received through the overhead wire to third dc power; and  
a power-outputting unit, connected to both the electric power inverter and the electric power supplier, for **outputting the higher dc power of either the second dc power or the third dc power**.  
*Emphasis added*

As discussed previously, *Tanaka* while describing a power supply circuit having butt-jointed diodes in reference to the prior art, teaches away from using this particular design. Most notably, *Tanaka* discloses that the power supply circuit is defective in that both the first and second power sources serve to supply power to the same system in that the voltage supplied to the system is reduced because of the forward voltage drop of a diode, and in that the voltage available from a power source is reduced by a value of the diode voltage drop. A second defect in the commission of power supply circuit is that these systems must always be designed with consideration of the voltage drops. See Figure 1 and col. 1, lines 55-45.

As a result, even if one of ordinary skill would have looked to *Tanaka* in an effort to remedy the deficiencies of *Nomura*, Applicant questions whether the power supply circuit described by *Tanaka* would have been reasonably integrated into the design of *Nomura* given the disclosed defects. The rationale for combining these references is seemingly outweighed by the noting of the inherent defects of the design.

In the current rejection, the Office disagrees with Applicants' above position and alleges that despite the teachings of *Tanaka* one of ordinary skill would still use the butt-jointed diode design in order to prevent backflow of power into the inverters. See Office Action, pg. 3, 1st full pgph. The Office alleges that the butt-jointed diode

configuration of *Tanaka* can be integrated into *Nomura* at the point of convergence of the parallel inverter paths. See Fig. 3 of *Nomura* below.



*Nomura* discloses, however, that a "second DC voltage" is formed at the output of the smoothing circuit 70 (i.e., elements 41, 42, 52, 53, 54, 55), which has at its input the point convergence of the parallel inverter paths. See *Nomura*, col. 3, lines 15-19. Applicants' claimed power-outputting unit, outputs the higher of the second dc power or third dc power. See Applicants' claim 9.

Thus, even if these references could be combined under the rationale alleged by the Office, which Applicants do not believe that they can, Applicants claimed combination still does not read on the resulting structure. Namely, the point at which the Office alleges that *Nomura* is modified with the relied upon features of *Tanaka* is

not the point at which *Nomura* produces the second DC voltage. Therefore, the device that results from the combination would not include a power-outputting unit that outputs either the second dc power or third dc power as recited in Applicants claim 9.

Under careful analysis, Applicants could find no point in *Nomura* at which the features of *Tanaka* could be integrated to produce Applicants' claimed result. As a result, a *prima facie* case of obviousness has not been established.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Moreover, obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hosp. Sys. V. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). For at least the above reasons, Applicants respectfully request that the rejection of claims 9-22 under 35 U.S.C. §103 be withdrawn.

**Conclusion**

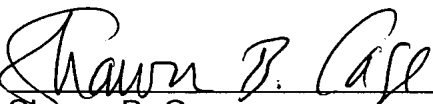
Based on the foregoing remarks, Applicants respectfully submit that claims 9-22 are allowable and this application are in condition for allowance. In the event any issues remain, the Office is invited to contact Applicants' representative identified below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: January 21, 2009

By:

  
Shawn B. Cage  
Registration No. 51522

P.O. Box 1404  
Alexandria, VA 22313-1404  
703 836 6620